Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-11. (Canceled)

12. (Original) A method of manufacturing an alkaline battery comprising:

providing a positive electrode including an active cathode material including lambda-manganese oxide; and

forming a battery including the positive electrode and a zinc electrode,

wherein the active cathode material has a specific discharge capacity to a 0.8V cutoff of greater than 300 mAh/g at a discharge rate of 20 mA/g of active cathode material.

13. (Currently amended) ~~The~~ A method of ~~claim 12,~~ manufacturing an alkaline battery, the ~~wherein providing the electrode includes preparing lambda-manganese dioxide by a~~ method comprising:

providing a positive electrode including an active cathode material including lambda-manganese oxide, wherein providing the electrode includes preparing lambda-manganese dioxide by a method comprising:

contacting water with a compound of the formula $Li_{1+x}Mn_{2-x}O_4$, wherein x is from –0.02 to +0.02;

adding an acid to the water and compound until the water has a pH of 1 or less;

separating a solid from the water and acid; and

drying the solid at a temperature of 120°C or below to obtain the lambda-manganese dioxide; and

forming a battery including the positive electrode and a zinc electrode,

wherein the active cathode material has a specific discharge capacity to a 0.8V cutoff of greater than 300 mAh/g at a discharge rate of 20 mA/g of active cathode material.

14. (Original) The method of claim 13, wherein the compound has a B.E.T. surface area of between 1 and 10 m^2/g.

15. (Original) The method of claim 13, wherein the compound has a total pore volume of between 0.05 and 0.15 cubic centimeters per gram.

16. (Original) The method of claim 13, wherein the compound of the formula $Li_{1+x}Mn_{2-x}O_4$ has a spinel-type crystal structure.

17. (Original) The method of claim 13, wherein the solid is dried at a temperature of less than about 100°C.

18. (Original) The method of claim 13, wherein the solid is dried at a temperature between 50°C and 70°C.

19. (Original) The method of claim 13, wherein x is from –0.005 to +0.005.

20. (Original) The method of claim 13, wherein contacting water and the compound includes forming a slurry.

21. (Original) The method of claim 20, wherein the slurry is maintained at a temperature below 50°C.

22. (Original) The method of claim 13, wherein the acid concentration is between 1 and 8 molar.

23. (Original) The method of claim 13, wherein the acid is sulfuric acid, nitric acid, perchloric acid, hydrochloric acid, toluene sulfonic acid, or trifluoromethyl sulfonic acid.

24. (Original) The method of claim 20, wherein the temperature of the slurry is maintained substantially constant during the addition of acid.

25. (Original) The method of claim 13, wherein the pH is 1 or less.

26. (Original) The method of claim 13, further comprising washing the solid separated from the water and acid with water until the washings have a pH greater than 6.